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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,823	03/27/2001	Henry Kopf III	2780-183	9987

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW
PO BOX 14329
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER
SAVAGE, MATTHEW O

ART UNIT	PAPER NUMBER
1723	

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/818,823	Applicant(s) KOPF, HENRY
	Examiner Matthew O Savage	Art Unit 1723

-- The MAILING DATE of this communication app ars on the cov r sh et with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-13,16 and 19* is/are pending in the application.

4a) Of the above claim(s) *9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,10-13,16 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-8, 10-13, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopf '930 in view of Demmer et al and/or Karbachsch et al.

With respect to claim 1, Kopf discloses all of the details of claim 1 with the exception of at least one thin gasket layer bonded to at least the main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, and the gasket layer on each main top and bottom surfaces of the filtration cassette having openings therein communicating with the inlet basin, outlet basin, and permeate passage openings of the filtration cassette. Both Demmer et al (see FIG. 3, element 3) and Karbachsch et al (see FIG.2, element 90) disclose at least one thin gasket layer bonded to at least the main top and bottom surfaces of the filtration cassette, the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the gasket layer on each main top and bottom surface of the filtration cassette having openings therein communicating with openings in the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of

Karbachsch et al. Demmer et al and Karbachsch et al suggest that such an arrangement facilitates assembly of the cassette with adjacent structure since the gasket is bonded to the cassette. It would have been obvious to have modified the cassette of Kopf so as to have included the gasket layers bonded onto top and bottom surfaces of the cassette and including openings in the gasket layers communicating with openings of the cassette as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Concerning claim 3, both Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application.

Regarding claims 4-5, Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Regarding claims 6-7, Demmer et al and Karbachsch et al fail to specify the recited temperature resistance ranges, however, such a modification would have been obvious in order to optimize the cassette for a particular application.

As to claim 8, Demmer et al and Karbachsch et al both disclose the gasket layer as encapsulating the cassette.

Concerning claims 10 and 11, Karbachsch et al disclose silicone (see line 13 of col. 6).

Regarding claims 12 and 13, Karbachsch et al disclose molding (see lines 8-18 of col. 8).

As to claim 16, Kopf discloses the recited ports.

With respect to claim 19, Kopf discloses all of the details of claim 19 with the exception of at least one thin gasket layer bonded to at least the main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the gasket assembly fully encapsulating the filtration cassette, and the gasket layer on each main top and bottom surfaces of the filtration cassette having openings therein communicating with the inlet basin, outlet basin, and permeate passage openings of the filtration cassette. Both Demmer et al (see FIG. 3, element 3) and Karbachsch et al (see FIG.2, element 90) disclose at least one thin gasket layer bonded to at least the main top and bottom surfaces of the filtration cassette, the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the thin gasket

layer fully encapsulating the filtration cassette, the gasket layer on each main top and bottom surface of the filtration cassette having openings therein communicating with openings in the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of Karbachsch et al. Demmer et al and Karbachsch et al suggest that such an arrangement facilitates assembly of the cassette with adjacent structure since the gasket is bonded to the cassette. It would have been obvious to have modified the cassette of Kopf so as to have included the gasket layers bonded onto top and bottom surfaces of the cassette and including openings in the gasket layers communicating with openings of the cassette as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Applicant's arguments filed 7-21-03 have been fully considered but they are not persuasive.

Applicant argues that claim 9 should be considered, however, the claim has been withdrawn from consideration since it is directed to the non-elected species shown in FIG. 1A.

Applicant's argument that the modification of the Kopf filter cassette to include the bonded gasket structure disclosed by Demmer et al and Karbachsch et al as set forth in the rejection of claims 1 and 19 would not improve the seal between the cassette and adjacent structure is noted, however, it is held that such a modification would have been obvious in order to facilitate assembly of the cassette with adjacent structure since the gasket is bonded to the cassette.

Applicant argues that there is no modification to combine the Kopf and Demmer et al references since Kopf discloses a cross flow filter whereas Demmer et al discloses a dead end filter, however, it is held that the references are combinable since they are analogous art in that both disclose filter press configurations incorporating filter membrane cassettes requiring gaskets for sealing to adjacent structure.

Applicant argues that there is no modification to combine the Kopf and Karbachsch et al references since they disclose layered membrane filter arrangements that differ from one another, however, it is held that the references are combinable since they are analogous art in that both disclose filter press configurations incorporating layered cross flow membrane arrangements requiring gaskets for sealing to adjacent structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is 703-308-3854. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and the same for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

M. Savage

Matthew O Savage
Primary Examiner
Art Unit 1723

mos
August 9, 2003